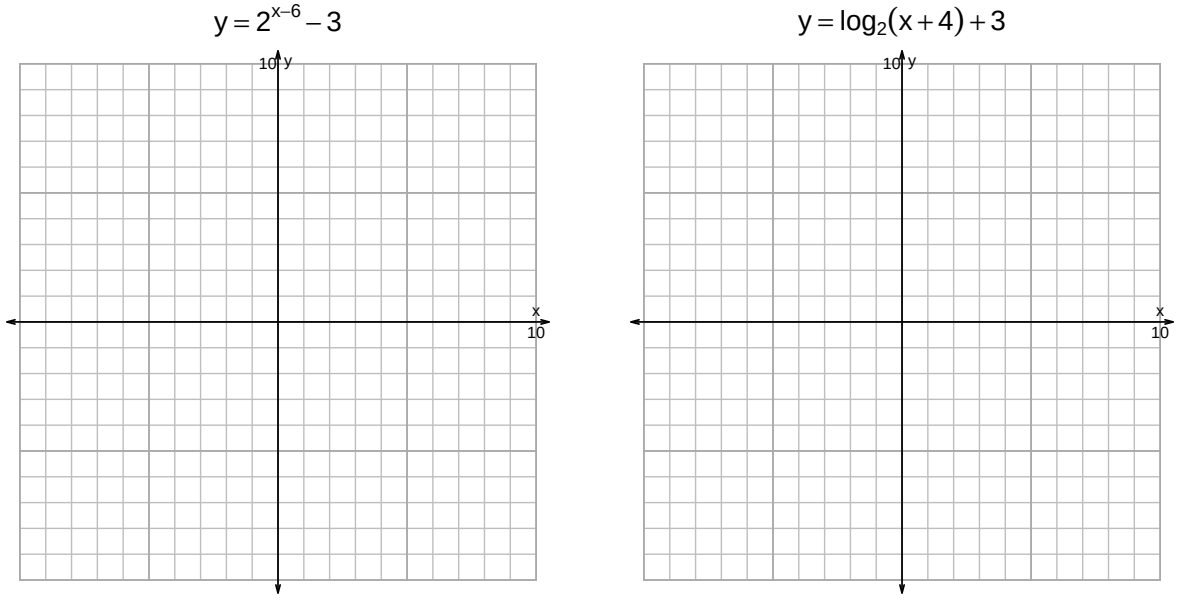
Name: Date:

S18QUIZ: EXP LOG (QUIZ V239)

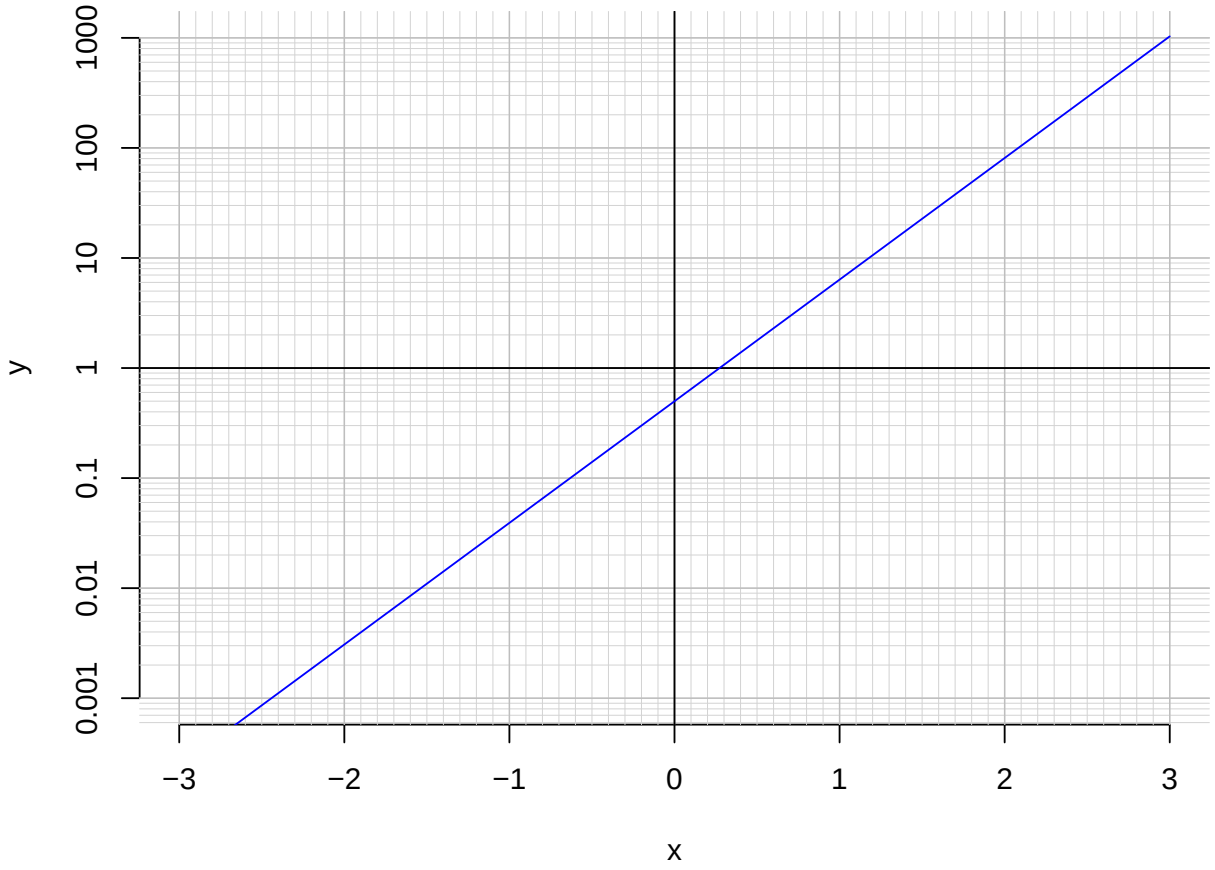
1. Graph $y = 2^{x-6} - 3$ and $y = \log_2(x+4) + 3$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{3}{4}\right) \cdot 2^{-7t/5}$$

3. An exponential function $f(x) = 0.499 \cdot e^{2.54x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-0.2)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(800)$.